```
music compiler •27/1/67
top=7777
dimension rdb(140)
define error x
                                        jsp er
flexo x
terminate
define complain x
                                        jsp er1
                                        flexo x
terminate
0/
                                        jmp cln
beg,
                                        lem
                                        clcVlia
                                        tyo
                                        cli
                                        law flexo
                                                    af
                                        arq
                                        jmp nots
                                        tyi
                                        law 47
                                        arq
                                        jmp busy
                                        law 51
                                        arq i
                                        jmp rt-2
                                        jsp txx
busy,
                                        text /busy/
                                        jmp beg
                                        clivclavhltvlaivclf 7
nots,
                                        jmp rt-2
                                       clcVlia
stp,
                                        tyo
                                        cli
                                       law flexo
                                                   af
                                       arq
                                        jmp nots
                                        tyi
                                       lai
                                        sad (77
                                       jmp rt-2
cln,
                                        law i 51
                                       arq
                                       law i 20
                                        jda fee
                                       lac (600000
                                        jda ppp
                                       law i 520
                                        jda fee
                                       law i 47
                                       arq
                                       dsm
                                       clcVhlt
```

```
pnt,
           add .
           dac tne
                                       /corrected for accidentals, key sig. a,
                                       /O=4th g below middle c
                                       /84=4th g above middle c
           add tll
                                       /correct for up, down
           sub (10.
           spa
           jmp uat
           sub (63.
           sma
           jmp uat
           add (64.
           dac the
                                      /1=3rd f below middle c "bass b5"
                                       /63=3rd g above middle c "treble 17"
           lac si
                                      /calculate articulation
           spa
           jmp tms
           sza i
          .jmp tmt
           sub (1
           jmp +2
tmt,
           lac ss
                                      /get implicit articulation
           dac sv
                                       /1=0, s=1, e=2, h=3, q=4
           lac et
                                       /check for embellishments
           spa
           jmp tme
           sza
           jmp emb
           lac sv
           ral 6s
           jmp \cdot +2
s70,
           cla
           ior the
           ral 9s
           ior nft
           jda nc
           lac nl
           dac 1tn
                                      /last note
s72,
           lac nft
           adm mm
                                      /no. of 192nds used in measure
           lac si
           dac sid
                                      /explicit articulation of last note
           jmp out
           lac the
cpp,
                                      /copy pitch from previous note
           sza i
           jmp rr
                                      /was a rest
           lac ton
           jmp s2v
rr,
           dzm tne
           lac sh
           ior na
           ior fl
           ior si
           ior et
          sza i
           jmp s70
           error air
           jmp s70
```

```
error eor
eor,
           jmp s70
eit,
           error eit
           jmp s70
tme,
           error tme
           jmp s70
tms,
           error tms
           jmp tmt
uat,
           error uat
           dzm tne
           jmp s70
tmf,
           error tmf
del,
           cla
                                        /drop a note, suppress mts error
           dap mts
           jmp out
tff,
           error tff
           jmp del
ert,
           error ert
           jmp del
           error unc
unc,
           jmp del
dtu,
           error dtu
           jmp del
tic,
           error tic
           jmp del
           jsp read
up,
           sza i
           jmp up
           lac nf1
           dac tll
up1,
           jmp out
down,
           jsp read
           sza i
           jmp down
           lac nf1
           cma
           jmp up1
           law 13.
bass,
           jda clef
tenor,
           law 17.
           jda clef
           law 19.
alto,
           jda clef
treble,
           law 25.
           jda clef
clef,
           0
           jmp out
units,
           jsp read
           sza i
           jmp units
           lac nf1
           ral 1s
```

```
add nf1
ral 1s
dac 3u
clc
dac irl
jmp out

1, cla
jda ss
law 1
jda ss
law 2
jda ss
law 3
jda ss
law 3
jda ss
law 4
jda ss
```

```
law i 49.
emb,
          add ton
           sma
           jmp eor
          add (49.
          spq
           jmp eor
          add (mt-1
          dap pmt add (nt-mt
          dap pnt
          add (kt-nt
          dap pkt
          lac i pmt
          add i pnt
          add i pkt
          add tll
          add lwr
          sub (10.
          spa
           jmp eor
          sub (63.
          sma
          jmp eor
          add (64.
          dac tnd
                                       /next lower note
          law 2
          adm pmt
          law 2
          adm pnt
          law 2
          adm pkt
          lac i pmt
          add i pnt
          add i pkt
          add tll
          add upr
          sub (10.
          spa
          jmp eor
          sub (63.
          sma
          jmp eor
          add (64.
          dac tnf
                                       /next higher note
          lac i et
                                       /minimum time required
          mul trl
          scr 1s
          lai
          sub nft
          szm
                                      /too short
          jmp eit
          idx et
                                       /dispatch
          jmp i et
```

```
m2,
           2
                                       /m - trill
           jsp tr1
           lio tne
           sma
           lio tnf
           lai
                                       /finish trill
trn,
           ral 9s
           ior t1
           jda nc
           lac t1
           cma
           adm t2
           law <u>i</u> 1
           adm T3
           sza i
           jmp s72
                                       /done
etl,
           lac t2
           sal 1s
           add t3
           and (-1
           clivswp
           div t3
                                       /calculate time for next note
           hlt
           dac t1
           lac t3
                                       /number of notes remaining
           rar 1s
tr3,
           jmp .
                                       /set up trill
tr1,
           dap tr3
           lac nft
           dac t2
          add trl
          and (-1
           clivswp
          div trl
          hlt
          sal 1s
                                       /total number of cycles
          dac t3
           jmp etl
n2,
                                       /n - trill with grace notes
           jsp tr1
           lio tne
           sma
           lio tnf
           sad (1
           lio tnd
           jmp trn
k2,
                                       /o - mordent
           law 3
           dac t3
           law m2+2
           jmp f3
```

```
w2,
                                         /w - inverted trill
           jsp tr1
           lio tne
           spa
           lio tnf
           jmp trn
f2,
                                         /f - full turn
           law 5
           dac t3
                                         /split time 5 ways
           law n2+2
ſ3,
           lio nft
           dio \overline{t}2
           dap tr3
           jmp etl
d2,
                                         /d - inverted mordent
           lac tne
           ral 9s
           ior trl
           jda nc
           lac tnd
           ral 9s
           ior trl
           jda nc
lac trl
           ral 1s
           cma
                                         /use up remaining time
etx,
           add nft
           ral 3s
                                         ior sv
           ral 6s
           ior tne
           ral 9s
           jda nc
           jmp s72
           4
u2,
                                         /u - turn
           lac tnf
           ral 9s
           ior trl
           jda nc
lac tne
           ral 9s
           ior trl
           jda nc
           lac tnd
           ral 9s
           ior trl
           jda nc
           lac trl
           ral 1s
           add trl
           jmp etx
```

```
3 lac tnf
p2,
                                       /p - mordent
           rar 8s
           ior trl
           sar 1s
           jda nc
           lac tne
           rar 8s
           ior trl
          sar 1s
           jda nc
           lac tnf
           rar 8s
          ior trl
           sar 1s
           jda nc
           lac trl
           sar 1s
          dac t3
           sal 1s
          add t3
           jmp etx
          3
lac nft
02,
                                       /o - odd numbered trill
           dac t2
          and (-1
           clivswp
          div trl
          hlt
           sal 1s
          add (1
          dac t3
          law m2+2
          dap tr3
           jmp etl
```

```
trill,
             jsp read
             sza i
             jmp trill
law 177
and nf2
             sza
             sas nf2
             jmp ertt
add (rcr-1
             dac qqt
             and nf2
             sza
             jmp ertt
             lac fu
             cli
qqt,
             0
             szaVsni i
             jmp dtut
             dac t1
             ral 1s
             lio c1
             sni
             add <u>t1</u> dac <del>tr</del>1
             jmp out
dtut,
             error dtu
             jmp out
ertt,
             error ert
             jmp out
```

```
law kt
key,
            dap .+3
            law mt
            dap .+2
           dzm .
           dzm .
           idx .-2
            idx .-2
           sas .+2
            jmp .-5
           dzm mt+49.
           dzm kt+49.
ke2,
            jsp read
           sza i
           dzm nf1
           add sh
           add na
           add fl
           sza i
            jmp ke2
           lac na
           sza
            jmp out
           clf 2
           lac fl
           sza i
           stf 2
                                         /sharp
           sza i
           lac sh
           sub nf1
           spa
           cla
           add nf1
           dac nf2
           law i 1
           szf 2 i
           law i 5
           dac nf
ke3,
           lac nf2
           sza i
           jmp out
           lac nf
           dac cn
ke4,
           law 7
           adm cn
           sub (49.
           sma
           jmp ke5
           add (kt+49.
           dap .+4
           law i 1
           szf 2
           law 1
           adm .
           jmp ke4
           law 3
szf 2
ke5,
           law 4
```

add nf

sma sub (7 dac nf law i 1 adm nf2 jmp ke3

```
/deposit note
nc,
           dap cnx
           idx nl
           sad bc
           jmp tof
           lac nc
           dac i nl
           jmp .
cnx,
                                        /deposit bar
sbc,
           0
           dap sbx
           law i 1
           adm bc
           sad nl
           jmp tof
           lac sbc
           dac i bc
           idx bl1
           idx bl2
sbx,
           jmp .
                                        /feed
fee,
           0
           dap fex
           szs 10
           jmp fex
           cli
           ppa
           isp fee
           jmp fee+2
fex,
           jmp .
                                        /punch binary word
ppp,
           0
           dap ppx
           szs 10
           jmp ppx
           lio ppp
           ppb
           ril 6s
           ppb
ril 6s
           ppb
ppx,
           jmp .
```

```
in,
           dap inx
                                                     /read character
in0,
           cks
           ril 1s
           spi i
           jmp .-3
           rrb
           iot 1
           sni
           jmp in0
           rir 7s
           spi
           jmp in0
           ril 7s
           lai
           ior (rar dac .+2 law 2525
           0
           sma
           jmp ilp
           law 77
           and -4
inx,
           jmp .
ilp,
           jsp txx
           text /ilp
           jmp in0
er,
           clf 3
                                                    /error - print syllable in r
           jmp +2
er1,
           stf 3
                                                    /error
           dap erx
           szf 6
           jmp er3
                                       /entire line already in
           lac poi
                                       /read in rest of line
           dap fl2
           lac ch
           sad (77
erk,
           jmp er3
           idx fl2
           sad (dac rdb+140
           jmp bof
           jsp in
           dac i fl2
           jmp erk
er3,
           skp .
           jmp erq
           jsp red
           jsp txx
           text /
To err is human---to forgive, divine.
```

```
cla
           dap er3
           jsp blk
erq,
           szf 5
           jmp erm
                                       /syllable already printed
           szf 3
           szf 6 i
           jmp +2
                                       /call to er1 and line has been printed
           jmp erm
           law rdb
           dap f12
erl,
           szf 3
           jmp ern
           lac fl2
           sad fl1
           jsp red
           lac fl2
           sad poi
           jsp blk
           lio i fl2
ern,
           tyo
           idx fl2
           lai
           sas (77
           jmp erl
           stf 5
stf 6
erm,
           lio (36
           tyo
           szf 3
           jsp red
           szf 3 i
           jsp blk
erx,
           lac .
           lio .+3
           rcl 6s
           tyo
           sas .
           jmp .-3
           clcVlia
           tyo
           idx erx
           jsp blk
           jmp i erx
```

```
bof,
           jsp txx
           text /
Source line has too many characters.
           law rdb
           dap poi
           lio i poi
           tyo
           idx poi
sas (dac rdb+100
           jmp -3
           clcVlia
           tyo
           jmp beg
tof,
           jsp txx
           text /
Table overflow. Subdivide source text.
           jmp beg
           dap rx
red,
           1aw 35
           jmp .+3
blk,
           dap rx
           1aw 34
           sad clr
rx,
           jmp .
           dac clr
           lia
           tyo
           jmp rx
34
clr,
txx,
           dap txy
           lio i txy
           idx txy
           lac (607600
           rcl 6s
           sad (lai
           jmp .
txy,
           sad .+2
           jmp txx+1
           swp
           tyo
           lia
           jmp txy-3
```

```
read,
            dap rex
                                                       /read syllable and terminato
            law 77
            sas ch
            jmp re1
            law rdb-1
                                         /if new line, reset buffer
            dap poi
clf 6
                                         /on if line already in buffer
re1,
            law 1
            add poi
            dap fl1
                                         /points to first character of syllable
            law 40
                                         /current value of dot
            dac fc
            law 100
                                         /dots accumulated in fu
            dac Tu
            dzm tf1
            dzm tf2
            law tf1
            dap tp
            dzm cn
                                         /counts non-numeric characters
            law nf1
            dap np
            dzm a1
                                         /clear all counters
            dzm b1
            dzm c1
            dzm g1
            dzm r1
            dzm cm
            dzm fl
           dzm na
           dzm sh
           dzm si
           dzm <u>u</u>pr
dzm <u>l</u>wr
           dzm et
           clf 4
                                        /on if reading comment
           clf 5
                                        /on if number partially entered
rlp,
           idx poi
sad (dac rdb+140
           jmp bof
           szf 6
           jmp in1
                                        /character already in
           jsp in
poi,
           dac .
           sad (72
           clf 4
           szf 4
           jmp <u>r</u>lp
dac ch
                                        /comment
           add (dtb
           dap dtp
```

```
dtp,
           lio .
           spi i
           jmp tp-1
           xct i dtp
           jmp ema
                                        /articulation or embellishment
           lio i dtp
                                        /i, j, y, or z
           rir 2s
           law upr
           spi
           law lwr
           dap emu
           law 1
           and i dtp
           sza i
           law i 1
emu,
           adm .
           jmp tp
           spa
ema,
           jmp em
           lio si
           dac si
           sni
           jmp tp
           clc
                                        /too many
           dac si
           jmp tp
           lio et
em,
           dap et
           sni
           jmp tp
           clc
                                       /too many
           dac et
           jmp tp
                                        /count
           idx i dtp
tp,
           lac .
           lio ch
           rcr 6s
                                        /pack
           dac i tp
           idx cn
           sad (3 idx tp
           szf 5
           idx np
           jmp rlp-1
in1,
           lac i poi
           jmp poi+1
```

```
dtb,
            jmp sep
                                         /space
            repeat 11, jmp n
            jmp rlp
            jmp rlp
                                         /stop code
            jmp rlp
            jmp rlp
            jmp rlp
            jmp rlp
            jmp n
                                         /0
                                         /slash
            jmp sep
           law 2
                                         /s - stacatto
            jmp tp
                                         /t
           law i 7777-u2
                                         /u - turn
            jmp tp
           law i 7777-w2
                                         /w - inverted trill
           jmp xe
sni 3
                                         /x
                                         /y - raise lower note
                                         /z - depress lower note
            sni 2
            jmp rlp
                                         /comma
cm,
            0
            jmp rlp
            jmp rlp
                                         /tab
            jmp sep
            jmp rlp
            jmp rlp
                                         /j - depress upper note
            sni O
                                         /k - mordent
           law i 7777-k2
                                         /l - legato
           law 1
                                        /m - trill
           law i 7777-m2
           law i 7777-n2
law i 7777-o2
law i 7777-p2
                                        /n - trill with grace notes
                                         /o - odd numbered trill
                                        /p - shake
           law 5
                                        /q - quarter
r1,
           0
                                         /r - rest
            jmp rlp
           jmp rlp
fl,
                                         /- - flat
           0 -
                                        /) - natural
na,
           jmp rlp
sh,
                                        /(-sharp)
           jmp rlp
                                        /a - above
a1,
           0
                                        /b - below
b1,
                                        /c - triplet
c1,
           0
           law i 7777-d2
                                        /d - inverted mordent
           law 3 law i 7777-f2
                                        /e - normal articulation /f - full turn
g1,
           0
                                        /g - grace note
           law 4
                                        /h - half
           sni 1
                                         /i - depress upper note
           jmp rlp
                                         /dot
           jmp dot
            jmp upc
                                         /upper case
           jmp rlp
            jmp rlp
           jmp sep
                                         /car. ret.
dtb+100,
```

```
0
                                        /text of pseudo-instruction
tf1,
tf2,
           0
nf1,
           0
                                        /first numeric field
nf2,
           0
           lac .
                                        /digit
n,
           sad np
           jmp np1
           szf 5 i
           dzm i np
           lac .
np,
           ral 2s
           add i np
           ral 1s
           lio ch
           rir 5s
spi i
           add ch
           dac i np
           dac nf2
           stf 5
np1,
           jmp rlp
           stf 4
upc,
                                        /upper case
           jmp rlp
sep,
           szf 5
                                       /space, tab, c.r., or slash
           idx np
           lac np
           sub (lac nf1 dac nf
                                        /number of numeric fields
           clf 5
                                       /on if syllable is printed
rex,
           jmp .
                                       /dot
dot,
           lac fc
           sma
           adm fu
           spa
                                       /dot error
           dzm fu
           lac fc
                                       /x
хe,
           sma
           rar 1s
           dac fc
           jmp tp
f11,
           dac .
                                       /points to beginning of syllable
           dac .
f12,
                                       /pointer used by err
constants
```

nt, /main pitch table decimal 0 2 5 7 12 14 17 19 24 26 29 31 36 38 41 43 48 50 53 55 60 62	4 9 16 21 28 33 40 45 46 52 57 6465 67	
72 74 77 79	6465 67 76 81 82	0 7
octal kt, .+50./ mt, .+50./ variables not, start beg	/key signature tab /status of current	le measure

```
jmp ng+1
           cma
           adm nft
                                       /rob it
           sub (6
           sma
           jmp ng
           lac nft
                                       /only 1/32nd left
           sub rob
           sma
           jmp ng
                                       /ok anyway
           error itg
           lac nfp
                                       /unrob it
           dac nft
           dzm rob
ng,
           lac r1
           sza
           jmp rr
                                       /rest
           lac nf
           sza i
           jmp cpp
                                       /copy pitch
           lac a1
           sub b1
           dac a1
           ral 1s
           add a1
           ral 2s
           add nf1
                                       /pitch corrected for a,b
           add clef
           dac ton
                                       /O=7th leger line below bass clef
                                       /49=space above 7th leger line above tre
           spa
           jmp uat
           sub (50.
           sma
           jmp uat
s2v,
          law mt
           add ton
           dap pmt
           add (nt-mt
           dap pnt
           add (kt-nt
           dap pkt
           lac sh
           add fl
           add na
           sza i
                                       /no accidentals given
           jmp pmt
           cla
           sas sh
           sad fl
           jmp s2w
           error nor
           jmp pmt
s2w,
           lac sh
           sub fl
           sub .
pkt,
           dac i pmt
                                       /save it in mt for rest of measure
           jmp pmt+1
           lac .
pmt,
           add i pkt
```

	072	
76	sza jmp gr	/grace note
16,	law 177 and nf2	/check duration
	sza sas nf2 jmp ert	
	add (rcr-1 dac qq	
	and nf2 sza	
	jmp ert lac fu cli	
qq,	0	
	szavsni i jmp <u>d</u> tu dac tim ral 1s	/dot underflow /duration in 64ths with dots
	lio c1	
	sni add <u>t</u> im	
	dac <u>nfp</u> dac <u>nft</u> dio ccc lac g1	duration in 192nds with dots and triple/save triplet status
	sza i	
gn,	jmp nr lac <u>n</u> ft adm rob	/grace note
	jmp ng+1	
15,	lac c1 ior ccc	/comma, get previous time
	lia lac tim	/previous time in 64ths
	spa jmp unc	/undefined
	ral 1s	/ under med
	sni add tim dac nfp	
	dac nft law 100	
	sas fu	
	jmp tic lac g1 sza	/no dots allowed
	jmp gr jmp ng+1	grace note with comma
gr,	law 1	
6- ,	sas nf jmp 16 lac (rer 5s	/if two fields, use given duration
	dac qq Jmp qq-2	/make it a 32nd
nr,	lac rob sza i	/not grace note or comma
	· ·	

```
lac nf1
           dac bl2
                                       /permit alternate numbering
           law 600
           jmp bb2
ff1,
           law 1
                                       /a note
           sub cm
           sma
           jmp ff2
           law 1
           dac cm
           error tmc
ff2,
           law 1
           sub g1
           sma
           jmp ff3
           error tmg
           law 1
           dac g1
ff3,
           law 1
           sub r1
           sma
           jmp ff4
           error tmr
           law 1
           dac r1
ff4,
           lac r1
           and g1
           sza
           jmp tmf
           law 2
           sub cm
           sub r1
           sub nf
           spa
           jmp tmf
           lac r1
           sza i
           jmp 17
           lac sid
                                       /rest
           szm
           jmp 17
                                       /no explicit articulation on last note
           lac ltn
           spa
           jmp 17
                                       /last note was in this measure
           lio i ltn
           cla
          ril 3s
rcr 3s
                                       /make preceding note legato
           dio i ltn
17,
          lio cm
           sni i
           jmp 15
           law i 2
                                       /no comma
           add r1
           add g1
           add nf
           spa
           jmp tff
                                       /must have 2 of r,g,number
           lac g1
```

```
out,
           law 21
           sas ch
           jmp lup
           jsp dun
           jmp lu1
dun,
           dap dux
           lio mm
           sni
dux,
           jmp .
           lac rob
           sza i
           jmp du2
           complain itg
du2,
           lac (600000)
           jda nc
           lac 1mb
           jda sbc
           lac nl1
           sza i
           jmp du1
           add (1
           dac n13
           dzm nl1
           lac nl
           dac nl2
           lac bc
           dac bcs
           lac mm
           sub mms
           dac mms
du1,
           law i not-1
           add nl
           dac 1mb
           lac mm
           sub 3u
           sza i
           jmp dux
           spa
           jmp mts
           complain mtl
           jmp dux
mts,
           skp .
           jmp dux
           complain mts
           jmp dux
ff,
           lac cn
           sza
           jmp ff1
                                       /other characters present
                                       /bar label
           lac nf1
           sad bl1
                                       /current bar
           jmp bb1
           sad b12
                                        /alternate bar
bbs,
                                       /skip if alternate bar permitted
           skp .
           jmp bbl
bb1,
           dac bl1
           cla
bb2,
           dap bbs
           jmp out
bbl,
           error bbl
```

```
jmp lu1
                                         jsp read
tempo,
                                         sza i
                                         jmp tempo
                                         lac nf1
                                        ior (700000
                                         jda nc
                                         jmp out
                                         cla
pp,
                                         jmp f+1
                                         law 1
p,
                                         jmp f+1
mf,
                                         law 2
                                         jmp f+1
ſ,
                                         law 3
                                         ior (500000
                                         jda nc
                                         jmp out
end,
                                         jsp dun
                                         lac (600000
                                         dac i nl
                                                      /make sure notes end with 60
                                         cla
                                         jda nc
lac bc
                                                      /note/bar marker
                                         sad (top+1
                                         jmp stp
                                                      /no music
                                         law not
                                                      /punch pointer
                                         dac t3
                                         idx nl
                                         sub bc
                                                                  /total size of i
                                         add (top-not+1
 p41,
                                         jda ppp
law i 6
                                         jda fee
                                         law i 104
                                                      /block count
                                         dac t1
                                         dzm t2
                                                      /chacksum
p42,
                                         lac i t3
                                         jda ppp
                                         lac i t3
                                         adm t2
                                         idx t3
                                        sad (top+1
                                         jmp p43
                                                      /done
                                         sad nl
                                         lac bc
                                                      /change from notes to bars
                                         dac t3
                                         isp t1
                                         jmp p42
                                         lac t2
                                                      /punch checksum
                                         jmp p41
p43,
                                         lac t2
                                        jda ppp
law i 20
                                                      /punch last checksum
                                         jda fee
                                         jmp stp
```

copy,

cl,

blc,

brc,

jda nc iac (600000 jda nc jmp irh jsp dun jsp read sza i jmp .-2cla /forbid alternate labels dap bbs law 1 1 add bl1 sub nf1 spa jmp blc add bc dac cbh lac nf1 dac t1 jsp read sza i jmp .-2 law i 2 add bc add bl1 sub nf1 dac nf2 law 1 add nf1 sub t1 spq jmp brc
law i not-1 add nl sad 1mb jmp cl /stray tempo or loudness com law not add i cbh dap .+1 lac . jda nc sad (600000 $jmp \cdot +3$ idx -4jmp .-5 lac 1mb jmp cl+1 lac i cbh jda sbc law i 1 adm cbh sas nf2 jmp cl jmp lu0 error blc jsp read sza i **jmp** .-2 jmp lu1

error brc

```
ttb,
                                         text /s
                                                                    jmp s
                                         text /e
                                                                    jmp e
                                         text /l
                                                                    jmp l
                                         text /h
                                                                    jmp h
                                         text /q
                                                                    jmp q
                                         text /sert
                                                                    jmp rest
                                         text /yek
                                                                    jmp key
                                         text /pocy text /inust
                                                                    jmp copy
                                                                    jmp units
                                         text /pp
                                                                    jmp pp
                                         text /p
                                                                    jmp p
                                         text /fm
                                                                    jmp mf
                                         text /f
                                                                    jmp f
                                         text /metop /
                                                                    jmp tempo
                                         text /dne
                                                                    jmp end
                                         text /irtll /
                                                                    jmp trill
                                         text /sabs /
text /ertelb/
                                                                    jmp bass
                                                                    jmp treble
                                         text /netro /
                                                                    jmp tenor
                                         text /tlao /
                                                                    jmp alto
                                        text /pu / text /wodn /
                                                                    jmp up
                                                                    jmp down
                                        text /epon /
                                                                    jmp open
                                         text /olces /
                                                                    jmp close
ttn,
rest,
                                         jsp dun
                                         jsp read
                                         sza i
                                         jmp .-2
                                         lac nf1
                                         sza i
                                         jmp lu1
                                        cma
                                        dac nf1
                                        lac irl
                                        sma
                                         jmp irm
                                                     /rest already exists
                                        law i not-1
                                        add nl
                                                      /location of rest
                                        dac irl
                                        lac 3u
                                        .jda nc
                                        lac (600000
                                        jda nc
irh,
                                        lac 1mb
                                         jmp irn+1
irm,
                                        law i not-1
                                        add nl
                                        sas 1mb
                                        jmp irk
irn,
                                        lac irl
                                        jda sbc
                                        isp nf1
                                        jmp irn
                                        jmp lu0
irk,
                                        law not
                                                     /stray tempo or loudness com
                                        add irl
                                        dap .+1
```

lac .

c13, lac (600000 jda nc lac lmb jda sbc c14, law not add 1mb dac t1 dzm nl2 law i not-1 add nl dac 1mb lac t1 c15, sad t2 jmp cl6 lac i t1 jda nc idx t1 jmp c15 c16, lac bcs sad t3 jmp out law i 1 adm bcs lac i bcs jda sbc jmp cl6 cl1, lac nl3 sas nl2 jmp rtc jmp cl4 cls, lac nl1 sza jmp rtc error nop dzm nl1 jmp out rtc, error rtc jmp out clt, spa jmp .+4 error rtl jmp cl2 xct mts

jmp cl2
error rts
jmp cl2

```
clc
 open,
                                         dac 1tn
                                         lac nl1
                                         ior nl2
                                         sza
                                         jmp tmo
                                         law i not-1
                                         add nl
                                         sas 1mb
                                         jmp op1
lac nl
                                                      /at beginning of measure
                                         dac nl2
                                         dac n13
                                         lac bc
                                         dac bcs
                                         dzm mms
                                         jmp out
 op1,
                                         lac nl
                                         dac nl1
                                         lac mm
                                         dac mms
                                         jmp out
 tmo,
                                         error tmo
                                         jmp out
                                         clc
 close,
                                         dac 1tn
                                         lac nl2
                                         sza i
                                         jmp cls
                                         lac bc
                                         dac t3
                                         law 1
                                         add nl
                                         dac t2
                                         lac mm
                                         add mms
                                         sza i
                                         jmp cl1
                                         sub 3u
                                         sza
                                         jmp clt
c12,
                                         lac nl3
                                         sad nl2
                                         jmp cl3
                                         lac i n13
                                         jda nc
                                         idx n13
                                         jmp cl2
```

sp,

ng1,

nps,

```
sma
jmp nps
law ttb
dap sp
lac .
sas tf1
jmp ng1
idx sp
lac i sp
sas tf2
jmp ng1+1
idx sp
jmp i sp
idx sp
idx sp
idx sp
idx sp
sas (lac ttn
jmp sp
error nps
jmp out
```

```
law 600
                                       dap er3
                                       cla
                                       dap bbs
                                                   /on if alternate bar label p
                                       clc
                                       dac tim
                                                   /previous time=undefined
                                       law 1
                                      dac bl1
                                      dac bl2
                                      law 77
                                      dac ch
                                                   /initial separator=c.r.
                                      lac (top+1
                                      dac bc
                                      law not-1
                                      dac nl
                                      law 32.x6
                                      dac 3u
                                                   /units=32
                                      clc
                                      dac īrl
                                                   /location of a rest
                                      law 6
                                      dac Trl
                                                   /trill time=32nd
                                      law 25.
                                      dac clef
                                                   /clef=treble
                                      law 2
                                      dac ss
                                                   /normal articulation=e
                                      dzm nl1
                                                   /repeat indicators
                                      dzm nl2
                                                   /up/down=0
                                      dzm tll
                                      law kt
                                                  /\text{key=}
                                      dap .+1
                                      dzm .
                                      idx .-1
                                      sas .+2
                                      jmp .-3
                                      dzm kt+49.
lu0,
                                      law i not-1
                                                                /set lmb to poin
                                      add nl
                                      dac Imb
1u1,
                                      dzm mm
                                                   /time used in this measure
                                      clc
                                      dac Itn
                                                   /last note in this measure
                                      law 600
                                      dap mts
                                      law mt
                                                   /clear accidentals
                                      dap .+1
                                      dzm .
                                      idx .-1
                                      sas .+2
                                      jmp -3
                                      dzm mt+49.
                                                   /time robbed for grace notes
                                      dzm rob
                                      jsp read
lup,
                                      add cm
                                      sza
                                      jmp ff
                                                   /numeric fields or comma pre
                                      lac cn
                                      sza i
                                       jmp out
                                                   /nothing
                                      sub (7
                                                   /pseudo-instruction
```

law rdb
dap poi
dap f12
jsp in
sad (13
jmp .-2
dac ch
dac i poi
idx poi
sad (dac rdb+140
jmp rt1
law 21
sas ch
jmp rt+3
lio i f12
tyo
idx f12
sas poi
jmp rt1
law 21
sas ch
jmp rt0
law i 6301

rrb

arq

rt1,